Exhibit 8

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

IN RE: NATIONAL PRESCRIPTION OPIATE LITIGATION	)	MDL No. 2804
	)	Case No. 1:17-MD-2804
THIS DOCUMENT RELATES TO ALL CASES	)	Hon. Dan A. Polster

WEDNESDAY, APRIL 24, 2019

HIGHLY CONFIDENTIAL – SUBJECT TO FURTHER CONFIDENTIALITY REVIEW

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Videotaped deposition of Anna Lembke, M.D., held at the offices of Lieff Cabraser Heimann & Bernstein, LLP, 275 Battery Street, 29th floor, San Francisco, California, commencing at 8:07 a.m., on the above date, before Carrie A. Campbell, Registered Diplomate Reporter and Certified Realtime Reporter.

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would hold yourself out as a psychiatrist as opposed to a pain management physician or an anesthesiologist?
MR. ARBITBLIT: Object to form.
THE WITNESS: I would disagree with that statement because I do hold myself out as having expertise in the field of pain management, but not anesthesiology, per se.
QUESTIONS BY MR. TSAI:
Q. How many hours have you spent treating patients in palliative care, for example, for their individual pain needs?
A. I have not worked in a palliative care setting.
Q. How many patients have you diagnosed with chronic pain as another example?
A. I have diagnosed many patients with chronic pain over the years. I've been in practice for more than 20 years, seen approximately 40,000 patients over my career. I couldn't tell the exact number that I've diagnosed with chronic pain, but if I had to put a ballpark estimate, I would say

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something on the order of 50 percent of my patients have some kind of chronic pain diagnosis.
Q. What is the total number of patients you've treated for their individual pain needs as opposed to addiction associated with surgeries or cancer?
MR. ARBITBLIT: Object to form.
THE WITNESS: It's difficulty for me to put an exact number on that. The majority of patients that I treat for their pain needs also have some sort of co-occurring mental health disorder, but pain is a priority in the overall treatment plan of those patients.
QUESTIONS BY MR. TSAI:
Q. So just to be clear, in your practice, you engage in primary diagnoses of patients who are complaining of pain and deciding how to treat their pain needs?
MR. ARBITBLIT: Objection.
THE WITNESS: Yes.
QUESTIONS BY MR. TSAI:
Q. What is the total number of

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peer-reviewed research studies or articles you've authored in the field of anesthesiology, pain medicine or hospice and palliative medicine?
A. I've authored two peer-reviewed articles in pain medicine journals, but I have written more broadly on the issue of pain vis-à-vis the opioid epidemic, and so that more broad area would include more of my publications.
Q. And focusing on the two articles in Pain Medicine journals, what were the subject matters of those two articles?
A. The subject matter of those two articles in Pain Medicine journals had to do with perioperative management of opioid agonist treatments such as buprenorphine and methadone.
Q. Who retained you as a testifying witness in this case?
A. Lieff Cabraser Heimann & Bernstein.
Q. And do you know who they represent?
A. They represent the MDL.

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Q. Can you be more specific?
A. They represent the plaintiffs in this case.
Q. And who are the plaintiffs in this case?
A. The plaintiffs are the counties and other entities who have been harmed as a result of the opioid epidemic.
Q. Which counties?
A. There are too many counties to -- I guess the bellwether counties would be Cuyahoga and Summit Counties in Ohio.
Q. Have you ever prescribed opioid medications?
A. Yes.
Q. Since when?
A. I prescribe opioid medications on a weekly basis.
Q. So when did you start prescribing opioid medications?
A. Since I obtained a DEA license.
Q. And when was that?
A. That was in 2000, 2001.
Q. Approximately how many patients do you believe you've prescribed opioid

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medications to?
A. It's difficult for me to put a number on that. I've been prescribing opioid medications since I became a practicing physician, and in recent years, I prescribed more opioid medication in the treatment of opioid use disorder.
Q. Other than opioid use disorder, have you prescribed opioid medications for any other condition or indication?
A. Yes, I have. In the general practice of medicine through my career, I have prescribed other opioid medications.
Q. What conditions or indications?
A. Typically pain conditions.
Q. When you prescribe opioid medications to your patients, do you weigh the risks and benefits based on your individual patients' medical histories and conditions?
A. Yes, of course.
Q. Do you have any degrees in epidemiology?
A. No.
Q. Can you explain to the jury

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what epidemiology means?
A. Epidemiology is the study of the progression of disease through a population.
Q. Did you yourself actually conduct any of the epidemiological research cited in your report regarding factors associated with the opioid crisis?
A. Yes, I did.
Q. And can you explain what research you conducted?
A. I conducted research regarding who was prescribing opioids in this country as well as who is prescribing buprenorphine for the treatment of opioid use disorder, which is relevant to the opioid epidemic more broadly.
Q. And what was the information upon which you conducted your research?
A. It was based on Medicare -- a Medicare database from 2013.
Q. Did you calculate or formulate any of your own regression models or statistical analyses in this case?
A. No, I did not.

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Q. Okay. Other than the Medicare database, did you conduct any of your own epidemiological analysis of any data in this case specific to the -- strike that.
Other than the Medicare database, did you conduct any original epidemiological analysis of any data in this case?
A. Yes, I did.
Q. What data?
A. Qualitative data that I collected in preparation for writing my book, "Drug Dealer, MD: How Doctors Were Duped, Patients Got Hooked, and Why It's So Hard to Stop."
Q. And what do you mean by qualitative data in connection with writing your book?
A. Interviews that I conducted with patients and health care providers in an attempt to understand the progression of the opioid epidemic in our population.
Q. Okay. And other than conducting interviews in connection with writing your book, did you conduct any

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quantitative analysis in connection with that?
A. No.
Q. If you were asked to design an epidemiological study and statistically analyze the data results for submission to a peer-reviewed journal, would you ask for help, or would you do that all by yourself?
MR. ARBITBLIT: Objection. Compound.
QUESTIONS BY MR. TSAI:
Q. You can answer.
A. So I don't hold myself out as a biostatistician. I work with others who have expertise in that area and together we collaboratively think about the important questions and interpret the data, so I would be intimately involved in that process, but I would not be conducting the statistical analysis by myself.
Q. What is the total amount of peer-reviewed research studies or articles you've authored in the field of epidemiology?
A. I feel like I answered that question before.

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working on the submission of any ANDA to the FDA?
A. No.
Q. What is an NDA?
A. I don't know.
Q. What is an ANDA?
A. I don't know.
Q. Have you ever worked on the submission -- do you have any experience working on the submission of any prescription medication marketing materials to the FDA for government approval?
A. I served on the research advisory panel of California where we reviewed studies that were being conducted in the state of California on using various investigative pharmaceuticals and my role was to assess the safety of those studies. And so in that sense I have reviewed numerous studies in the process of companies seeking FDA approval for their drug.
Q. And what was the connection in that panel to any company's marketing material?
A. Well, it wasn't marketing

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material, per se.
Q. Do you have any experience regarding FDA regulations that govern pharmaceutical marketing?
A. No.
Q. Have you ever treated any person in Cuyahoga or Summit Counties for opioid addiction?
A. No.
Q. Have you ever treated any patients in Cuyahoga or Summit Counties for any medical condition related to opioids?
A. No.
Q. Have you ever been to Summit County?
A. No, but I have been to Cuyahoga County.
Q. Are you able to identify any particular individuals whose opioid addiction or overdose led to costs incurred by Cuyahoga or Summit Counties?
MR. ARBITBLIT: Object to form.
THE WITNESS: I am able to -- I have analyzed the CDC data from Ohio, including Summit and Cuyahoga

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Counties, and so I can speak to the issue of the opioid epidemic in those counties.
QUESTIONS BY MR. TSAI:
Q. Is the CDC data that you are referring to specific to any particular individuals residing in those counties that allows you to identify their medical condition or the circumstances of their opioid use?
MR. ARBITBLIT: Object to form.
THE WITNESS: The CDC data is looking at individuals in aggregate, not any one individual that I could identify.
QUESTIONS BY MR. TSAI:
Q. Have you ever asked for or been provided any information specific to Cuyahoga or Summit Counties regarding individual persons whose addiction the counties contend led to costs in this case?
MR. ARBITBLIT: I'll instruct you not to answer as to that question because it involves the attorney-expert privilege.

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Don't answer.
QUESTIONS BY MR. TSAI:
Q. Let me rephrase it.
Have you ever reviewed any information specific to Cuyahoga or Summit Counties regarding any actual individuals whose opioid addiction the counties contend led to the costs that they're seeking in this case?
A. Well, I have reviewed information specific to Cuyahoga and Summit Counties regarding individuals living in those counties broadly speaking as an aggregate, not any one individual. I haven't personally treated any one individual living in those counties.
Q. Well, let me ask it this way: Do you have any basis to tell us whether for any individual in Cuyahoga and Summit Counties whose opioid addiction or overdose allegedly led the counties to incur expenses, the clinical context of their opioid use?
MR. ARBITBLIT: Object to form.
THE WITNESS: Yes, I believe that I do.

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trying to capture the very real phenomenon of flooding in our society of opioid medication as a result of misleading messaging by the defendants that led to the use of those opioids in minor and chronic pain conditions and then made them readily accessible, not just to people who were prescribed opioids, but even those not being prescribed opioids.

QUESTIONS BY MR. TSAI:

Q. And to be clear about the scope of this phenomenon, as you call it, does the Tsunami Effect include within its scope individuals who deliberately committed a crime in obtaining and using opioids?

MR. ARBITBLIT: Object to form.

THE WITNESS: Yes.

QUESTIONS BY MR. TSAI:

Q. And just in going back to our discussion about your practice of prescribing opioid medications to your patients, can you name the opioid medications that you have prescribed over the course of your career?

A. I have prescribed opioids,

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Schedule II opioids, over the course of my career, probably every one that you could imagine in the course of inpatient treatment.

And I can't specifically name them because I can't recollect the specific instances.

In recent years, especially practicing as an outpatient provider, I primarily prescribe buprenorphine-naloxone in the use of opioid use disorder.

Q. Have you prescribed oxycodone?

A. Not to my recollection in certain years. There may have been instances when I temporarily took over that prescription in the case of a patient that I inherited in an effort to help them taper off of that medication, but normally I would not do that.

Normally I would collaborate with my pain colleague and advise them how to help that patient taper down to a safer dose or come off the medication, oxycodone, all together.

Q. And when you refer to a pain colleague that you would collaborate with,

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what are you referring to?

A. Well, I have a courtesy appointment at Stanford University School of Medicine in the department of pain. Those courtesy appointments are given out in recognition of my expertise in the treatment of pain. I see patients within the Stanford University School of Medicine Pain Clinic. In that context, I regularly collaborate with my pain colleagues around complex patients. We have interdisciplinary team treatment meetings where we will discuss those patients in collaboration to try to come together to find the best treatment plan.

I also frequently communicate with my pain colleagues using the electronic medical records system and by telephone as we collaborate together to come up with the best treatment plan for our patients with pain.

Q. Are there any particular branded opioid medications that you can recall prescribing?

A. No.

Q. Do you recall prescribing hydromorphone?

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A. I think I already answered that question.

Q. What was your answer? I don't recall.

A. I don't recall any specific pain medications that I prescribed outside of the buprenorphine-naloxone that I now prescribe regularly in my outpatient practice.

Q. Do you have any experience or expertise in regard to the prescription drug supply chain?

MR. ARBITBLIT: Object to form.

THE WITNESS: I am aware of the role of the distributors in this case. I have read the complaint. I do acknowledge their contribution to the opioid epidemic, in particular the flooding of pills in small towns that should have alerted them to a problem, which they did not take action on.

MR. TSAI: Respectfully move to strike that answer.

QUESTIONS BY MR. TSAI:

Q. Have you ever worked for a

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pharmaceutical company or consulted for one?
A. No.
Q. Do you have any experience or expertise regarding the setting of DEA quotas for prescription opioid medications?
A. I'm aware of DEA quotas. I'm aware of the discussion around them vis-à-vis the opioid epidemic.
Q. Do you agree that the defendants in this case are part of the legal prescription medicine manufacturing and supply business?
MR. ARBITBLIT: Object to form.
THE WITNESS: I guess I'm not -- I don't really understand the question.
QUESTIONS BY MR. TSAI:
Q. The defendants in this case are making and selling legally approved, government-regulated medicines?
MR. ARBITBLIT: Is that a question or a statement?
QUESTIONS BY MR. TSAI:
Q. Do you agree?
A. Is that a question or a

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statement?
Q. I said, do you agree with that?
A. Could you rephrase the question?
Q. The defendants in the case are making and selling legally approved, government-regulated medicines; is that correct?
A. Well, I guess I would object to the form of the question, especially the government-regulated medicine part. I think that the defendants in this case have also had a major responsibility in that process of regulation.
Q. Do you have any basis to say that defendants are selling medicines that are not legally approved?
MR. ARBITBLIT: Object to form.
THE WITNESS: Yes, the medicines are legally approved.
QUESTIONS BY MR. TSAI:
Q. Do you agree that there are multiple steps between a prescription opioid medication being approved by the government on the one hand and the effects, the

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phenomenon that you call the Tsunami Effect?
MR. ARBITBLIT: Object to form.
THE WITNESS: I guess I would want to know what multiple steps you're referring to.
QUESTIONS BY MR. TSAI:
Q. Well, as you envisioned the Tsunami Effect, do you agree that for any of the prescription opioid medications that you refer to in your report -- first, it has to be submitted for FDA approval?
A. Yes.
Q. And are you familiar with what requirements must be met in order for the government to approve a prescription opioid medication as safe and effective?
A. I am familiar, but I have not been asked to opine on that aspect of the case.
Q. And in addition to approval by the Food and Drug Administration as safe and effective, do you agree that opioid medications must be approved by the DEA for manufacturing and sale?
A. Yes.

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Q. Okay. And then once an opioid medication pill is made, what is your understanding of how it makes its way to an actual individual in Cuyahoga and Summit Counties for use?
MR. ARBITBLIT: Object to form.
THE WITNESS: Well, there's the production part, and then there's the distribution part where it's then transported to a pharmacy, and then the pharmacy is the dispensing agent for that pill.
QUESTIONS BY MR. TSAI:
Q. And before any individual in Cuyahoga and Summit Counties can obtain an opioid, they need to get a prescription from a doctor, correct?
MR. ARBITBLIT: Object to form.
THE WITNESS: Yes.
QUESTIONS BY MR. TSAI:
Q. Okay. So if we could discuss one of the articles that you cite in your study.
MR. TSAI: Can we have Tab 3, the McCabe study?

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dentist, approximately 6 percent of them were later diagnosed with an opioid use disorder within a year.

My point being that there is a risk with exposure to medical use of opioids, not just to nonmedical use of opioids.

MR. ARBITBLIT: And Federal Rule 106, Rule of Completeness, Counsel, page 378 of the article you're reading from states exactly this, "Medical use of prescription opioids during adolescence is associated with greater odds of subsequent prescription opioid misuse," citing Harbaugh 2018, McCabe, 2013, and '16, and Mlech, 2015.

MR. TSAI: I object to counsel's testimony.

MR. ARBITBLIT: It's not testimony. It's the Rule of Completeness, Counsel. You should be familiar with it.

MR. TSAI: The --

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QUESTIONS BY MR. TSAI:

Q. So putting aside absolute risk, and we'll talk about risk later on, but what is your -- this is a finding comparing likelihood of addictive substance use disorder in two groups, correct, adolescents who had medical use of prescription opioids, no history of nonmedical use or abuse, and adolescents who never took prescription opioids, correct?

Am I reading that correct?

MR. ARBITBLIT: Object to form.

THE WITNESS: So to me, this -- that statement that you just read is good evidence for the Tsunami Effect. That basically because there has been increased access to opioids, including for teenagers, that has subsequently increased their risk of going on to develop some kind of substance use problem.

MR. TSAI: I move to strike.

QUESTIONS BY MR. TSAI:

Q. What is your -- what is the -- the meaning of the finding that adolescents

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who indicated medical use without a history of NMUPO did not differ from adolescents when no history of medical use of prescription opioids or NMUPO in the odds of substance use disorders?

Can you tell the jury what that means, in your opinion?

A. That means comparing the risk in those two populations, they had similar risk.

Q. So I wanted to ask you -- turning back to Exhibit 1, which is your report, on page 89, you talk about hepatitis C, HIV and other infectious diseases.

Have you reviewed any data to reliably rule out the likelihood that cases of hepatitis C, HIV or other infectious diseases were caused by actions independent from opioid use?

A. No.

Q. And actions independent of opioid use that are associated or that cause infectious diseases like HIV and hepatitis C include risky sexual conduct, for example; do

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you agree?

A. Yes.

Q. Have you reviewed any data to reliably rule out the likelihood that cases of hepatitis C, HIV or other infectious diseases you refer to existed prior to any opioid addiction or opioid abuse?

A. No.

Q. Do you have any -- did you conduct any analysis, or do you have any basis to quantify what percentage of cases of hepatitis C, HIV and other infectious diseases that you refer to were caused by reasons that had nothing to do with opioid use?

A. No.

Q. And just to be clear, opioid use disorder and addiction are not contagious, infectious diseases, correct?

A. I would sort of disagree with that.

Q. Is there a pathogen? Is there an opioid use pathogen?

MR. ARBITBLIT: Let her finish her answer.

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THE WITNESS: There is not a pathogen, per se, but the way that opioid use disorder has spread through the population is quite similar in pattern to the way that infectious diseases spread through close contacts.

QUESTIONS BY MR. TSAI:

Q. If I touch someone who has opioid use disorder, do I get opioid use disorder?

A. No, but you also don't get HIV.

Q. If I receive a blood transfusion from someone with opioid use disorder, do I get opioid use disorder?

A. No.

MR. ARBITBLIT: Counsel, we've been going just a over an hour.

Is it time for a little break?

MR. TSAI: Sure. Off the record, please.

VIDEOGRAPHER: We're going off the record, and the time is 9:11 a.m.

(Off the record at 9:11 a.m.)

VIDEOGRAPHER: We are now going

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back on the record, and the time is 9:23 a.m.

QUESTIONS BY MR. TSAI:

Q. And just one quick note: In most depositions, we don't have this handy LiveNote screen, and I've noticed that you've been hearing my questions but also reading.

If I could ask you just to listen to my questions. If you need clarification, you can certainly look, but this does -- if you kind of double up, it does take up more time.

MR. ARBITBLIT: I'll instruct you to pay no attention to that. You look at the screen. The questions are complex. It's serious litigation.

Do what you need to do to understand the question.

QUESTIONS BY MR. TSAI:

Q. So --

MR. ARBITBLIT: That's why the screen's here.

QUESTIONS BY MR. TSAI:

Q. -- let me turn to the second capitalized term in your report, "Dependence

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Effect," capital D, capital E, and there you refer to individuals who become dependent on opioids independent of addiction.

That's how you defined Dependence Effect.

What is opioid dependence, in your words, independent of addiction? What does that mean?

A. So that distinction has become important with the new criteria for diagnosing a substance use disorder with the DSM-V, which -- the DSM-V was a departure from the DSM-IV in the sense that prior to the DSM-V, the criteria of physiologic tolerance and withdrawal counted toward a diagnosis of addiction.

But with the evolution to the DSM-V, that no longer counted under the specific circumstances of a patient receiving an opioid from a medical doctor and developing tolerance and withdrawal as a result of taking that medication, that opioid, under a prescription as prescribed, which de facto made it more difficult, created a higher threshold, essentially, for

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diagnosing addiction with the DSM-V, but was a way of recognizing that the physiologic adaptation to opioids occurs to patients taking opioids with a medical -- with a medical prescription.

And so the DSM-V was an attempt to distinguish between those individuals who developed physiologic dependence under the care of a doctor versus those individuals who developed physiologic dependence, probably also in many instances under the care of a doctor, but also had these other behavioral components that we use to signify the problem of addiction.

Does that answer your question?

Q. So do you agree with the changes that were implemented in DSM-V's diagnostic criteria for opioid use disorder?

A. I accept those changes. I think that those -- that the physiologic dependence, so the neurobiological changes that occur in the brain as a result of physical dependence on the opioid, can't be distinguished necessarily from the neurobiological changes that happen in the

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QUESTIONS BY MR. TSAI:
Q. And discontinuation phenomenon, that is, when a person using an antidepressant is going off of it, is tapering off or down?
A. That's right.
Q. And they experience withdrawal?
MR. ARBITBLIT: Object to form.
THE WITNESS: They experience some physical symptoms associated with that taper process.
QUESTIONS BY MR. TSAI:
Q. So am I right that individuals -- some individuals classified as having an opioid use disorder under the prior DSM-IV framework would not be deemed to have an opioid use disorder under the current updated definition?
A. That's correct.
Q. Okay. And so in tieing your Dependence Effect phenomenon to dependence as opposed to addiction, that's a broader net; am I right?
A. Yes.
Q. It's more permissive?

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MR. ARBITBLIT: Object to form.
THE WITNESS: What do you mean by "permissive"?
QUESTIONS BY MR. TSAI:
Q. Well, you said lower bar, upper bar.
So let me get -- it's a lower bar to be considered dependent in your view as opposed to addicted?
A. I would say the criteria are different. I don't think I would use lower bar versus higher bar. They're now categorized as distinct and separate phenomenon.
The point of describing the Dependence Effect is to communicate that there are more than 10 million people in this country who have taken opioids as prescribed and become physically dependent and that that's a very serious and morbid physical condition, that being dependent on opioids is not some kind of benign or easily reversible phenomenon.
Q. Does prescribing or dispensing of opioid medications always lead to

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dependence?
MR. ARBITBLIT: Object to form.
THE WITNESS: Almost always, yes.
QUESTIONS BY MR. TSAI:
Q. Does it inevitably lead to dependence?
A. In the vast majority of cases, yes.
Q. Does it immediately and automatically lead to dependence?
MR. ARBITBLIT: Object to form.
THE WITNESS: Not immediately. It takes people varying degrees of time. Some people become dependent within a matter of days to weeks.
Other people can go much longer, but in the vast majority of cases, people who take opioids daily for an extended period of time become physically dependent on those opioids, such that they need more and more to get the same effect. And when they reduce their dose or stop taking them for some reason, they experience

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withdrawal.
And in many cases the withdrawal is excruciating and very debilitating.
QUESTIONS BY MR. TSAI:
Q. Have you reviewed any information or conducted any analysis to quantify what individuals in the counties, Cuyahoga and Summit Counties, became opioid dependent?
MR. ARBITBLIT: Object to form.
THE WITNESS: Is this getting back to what we talked about before, this question?
QUESTIONS BY MR. TSAI:
Q. I don't think I asked about opioid dependence.
A. Okay. Can you say the question again?
Q. Have you reviewed any information or conducted any analysis to quantify what individuals in the counties, Cuyahoga and Summit Counties, became opioid dependent?
MR. ARBITBLIT: Object to form.

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THE WITNESS: No. No.
QUESTIONS BY MR. TSAI:
Q. Can the Dependence Effect phenomenon predict what individuals in what particular cities or counties will become addicted to or overdose from opioids?
A. Yes.
Q. How so?
A. People who are dependent on opioids are at increased risk to suffer from overdose from those opioids, even separate from being diagnosed from opioids, and I can explain that physiology, if you would like.
It's also true that people who are opioid dependent are at very high risk to go on to meet DSM-V criteria for opioid addiction.
Q. Well, let me ask it from this angle.
Have you ever tested the Dependence Effect phenomenon to, for example, rule out the inclusion of individuals who deliberately committed a crime in obtaining and using opioids?
MR. ARBITBLIT: Object to form.

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THE WITNESS: I don't understand your question.
QUESTIONS BY MR. TSAI:
Q. Have you ever tested the Dependence Effect phenomenon -- well, let me ask it this way.
Does the Dependence Effect include within its scope individuals who deliberately committed a crime in obtaining and using opioids?
MR. ARBITBLIT: Object to form.
THE WITNESS: Yes.
QUESTIONS BY MR. TSAI:
Q. Does the Dependence Effect include within its scope individuals who deliberately misused a prescription opioid medication knowing that medication was not prescribed to him or her?
A. The Dependence Effect would include anybody who has become physiologically dependent on opioids.
Q. And that would include individuals residing in Cuyahoga and Summit Counties whose exposure to opioids was via opioids that were not prescribed to them?

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A. Yes.
Q. Okay. Does the Dependence Effect include within its scope individuals who deliberately misused an opioid medication knowing that they were not using it for its intended indication; for example, crushing it, snorting it for a high, for euphoria, instead of to treat an indicated pain condition?
A. Yes.
Q. So the third of your triagrid {phonetic} is the Gateway Effect, capital G, capital E.
So in -- on page 86 of your report, Exhibit 1, you describe the Gateway Effect as -- you say, "The trajectory to addiction begins with exposure." Is that right?
A. That's right.
Q. Okay. So have you ever tested -- well -- actually, strike that.
I wanted to ask one more question about the Dependence Effect.
Have you ever published the theory of the Dependence Effect in any

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peer-reviewed, scientific journal?
A. I haven't -- I haven't -- I haven't specifically used that terminology, but in the JAMA article that we published on buprenorphine prescribing, we do talk about the exposure and the millions of people exposed to opioids through a medical prescription, the vast majority of whom probably are opioid dependent.
Q. And have you specifically used the terminology of the Tsunami Effect, capital T, capital E, in any peer-reviewed scientific journal?
A. No.
Q. Have you ever tested the Gateway Effect, going to the third leg, to quantify what percentage of persons ultimately addicted to illegal heroin, or fentanyl, were individuals who started out purely with no substance abuse history and whose initial exposure was via a medically appropriate prescription of an opioid medication?
MR. ARBITBLIT: Object to form.
THE WITNESS: Are you asking me

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if I've personally done that quantitative research?
QUESTIONS BY MR. TSAI:
Q. Yes.
A. I have not.
Q. Have you ever used the specific terminology of the Gateway Effect and published that observation in any peer-reviewed scientific journal?
A. No.
Q. Have you ever tested the Gateway Effect phenomenon to rule out the inclusion of individuals who deliberately committed a crime in obtaining and using opioids?
A. I wouldn't rule out those individuals.
Q. Okay. So the Gateway Effect, as you envision it, as you define it, does include within its scope persons, including persons in Cuyahoga and Summit County, who deliberately committed a crime in obtaining and using opioids?
A. Yes.
Q. Does the Gateway Effect include

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within its scope individuals who deliberately misused a prescription opioid medication knowing that medication was not prescribed to them?
A. Yes.
Q. Does the Gateway Effect include within its scope individuals who deliberately misused a prescription opioid medication knowing it -- knowing that they were using it contrary to its intended indication and approved indication, for example, to get a high instead of treating pain?
A. So I would like to go back and amend what I said previously about the Gateway Effect and refer to my report, which on page 86, specifically says that the Gateway Effect describes those individuals who became exposed and addicted, including individuals who turned from prescription opioids to illicit sources of opioids such as heroin.
So what I'm -- the group I'm referring to in the Gateway Effect is, in fact, those individuals who started with a medical prescription and then became addicted

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through that medical prescription, as distinct from the Tsunami Effect, which is those individuals who -- which includes those individuals who used an opioid not necessarily prescribed to them.
Q. Okay. So the -- you know, the beginning bound of the set of individuals that you define as within the Gateway Effect are those individuals who received a prescription directly from a doctor?
A. Yes, and thank you for allowing me the opportunity to clarify that.
Q. So the Gateway theory posits a particular direction of events: First, prescription opioids prescribed by a doctor, and then later illegal heroin or street fentanyl addiction; is that right?
A. Not necessarily.
So that individual -- so you're right in the sense that it posits an individual who began with a prescription of an opioid from a doctor, but it -- and it could include those individuals who then turn to illicit sources of heroin, but it also includes those individuals who become

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addicted in an ongoing matter -- manner using the opioids prescribed by that doctor.
Q. Have you ever tested whether the Gateway Effect is confounded by individuals who had already used heroin before prescription opioid medications?
MR. ARBITBLIT: Object to form.
THE WITNESS: Well, that's something that the McCabe article looked at, and I think one of the salient findings there is it's really the combined effect of access to nonmedical opioids, plus medical use, that confers risk. It's not one or the other in isolation, and both of those individual groups can become addicted.
So people can get addicted entirely through a medical prescription and not engage in nonmedical use. They can engage in nonmedical use and then also be exposed medically; thus compounding their risk.

QUESTIONS BY MR. TSAI:
Q. So you would rely on the McCabe study's findings in regard to those groups that you mentioned?
MR. ARBITBLIT: Object to form.
THE WITNESS: No, I'm not relying on the McCabe study findings. As I said before, I've done my own qualitative research, and I've also -- I have vast experiential knowledge of this problem from the many patients I've treated in almost, you know, two decades.
So I have seen the pattern of opioid addiction as it has occurred in those individuals.
QUESTIONS BY MR. TSAI:
Q. Does the Gateway Effect include within its scope individuals who had first used heroin before they used prescription opioids?
A. No.
Q. And how would you know for a particular person in Cuyahoga or Summit County with opioid use disorder that medical

history, that sequence?
MR. ARBITBLIT: Object to form.
THE WITNESS: There are good national data that have surveyed individuals asking them about which -- individuals who have become addicted to opioids, asking them which opioid they started with, and over 80 percent of individuals report that they started with a prescription opioid.
QUESTIONS BY MR. TSAI:
Q. And those -- that statistic includes nonmedical use of prescription opioids?
A. Yes, it does, but it also includes medical use of prescription opioids.
Q. Have you ever tested whether the Gateway Effect is confounded by individuals who had already deliberately misused or abused other drugs before any medical opioid prescription?
A. There are those cases, and I have treated those individuals, and to me that doesn't mitigate the problem of addiction through an opioid prescription.

So, for example, I've had many patients who were in recovery from an addiction to something else, who then got exposed to an opioid through a medical prescription and became addicted to that opioid or relapsed to their other substance who otherwise, I believe, would not have done so were it not for the unnecessary exposure to that opioid through a medical prescription.
Q. And individuals with a history of substance abuse, and certainly a history of diagnosed substance use disorder, are at a higher risk of substance abuse disorder; do you agree?
MR. ARBITBLIT: Object to form.
THE WITNESS: We do know based on retrospective, epidemiologic studies that patients with a personal history of substance use disorder are at increased risk to develop an opioid addiction through a medical prescription of opioids, yes.
QUESTIONS BY MR. TSAI:
Q. So you would agree that for

individuals who reside in Cuyahoga and Summit County with opioid use disorder, an important piece of information to know is their history of substance abuse disorder and substance use history?
MR. ARBITBLIT: Object to form.
THE WITNESS: I don't really consider that that important a piece of history.
QUESTIONS BY MR. TSAI:
Q. So despite testifying that epidemiology shows that patients with a personal history of substance use disorder are at an increased risk to develop an opioid addiction through a medical prescription of opioids, you wouldn't want to know whether any particular individual in Cuyahoga and Summit Counties had such a personal history of substance abuse disorder?
MR. ARBITBLIT: Object to form. Argumentative.
THE WITNESS: To me what's much more relevant is that they're currently addicted to opioids. I don't consider their past history to

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inform that problem.
Furthermore, we know that many people without a past history of addiction can get addicted to opioids through a doctor's prescription.
QUESTIONS BY MR. TSAI:
Q. Okay. And since your opinion isn't -- individual's personal history of substance use disorder is not information that you would need to know, you did not review any such information for any actual individual with opioid use disorder in Cuyahoga and Summit County; am I right?
MR. ARBITBLIT: Object to form. Object to the preface.
THE WITNESS: I did not review any individual patient's history.
QUESTIONS BY MR. TSAI:
Q. So based upon your clinical experience, can you walk us through the steps between a person receiving a prescription from a doctor for an opioid medication and the ultimate outcome of going out to a street dealer and seeking illegal, nonprescribed, nonregulated heroin or fentanyl?

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How does that -- how does the Gateway Effect play out in your mind from prescription to going out into a street dealer?
MR. ARBITBLIT: Object to form. Vague. Compound.
THE WITNESS: An individual presents in a medical clinic with pain and is prescribed opioids by that doctor.
The doctor has been misled by false promotional statements on the part of defendants to believe that there are benefits to the use of opioids used long term in the treatment of pain, despite the absence of evidence for that. And that doctor has also been told that the risks are very small for addiction as long as that individual is being prescribed opioids for a pain condition.
So that well-intentioned and compassionate doctor, who is trying to do the right thing, will continue that opioid prescription and even increase

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the dose over time as that patient inevitably develops tolerance.
That doctor, furthermore, having been misled by the defendants to believe that no dose is too high, will continue to escalate that dose over months to years until that patient is at dangerously high doses of opioids and at risk for all kinds of morbidity and mortality, including the risk of addiction.
And eventually that individual, who is on very high doses of opioids, has neurologic changes in their brain such that if they -- they begin to experience withdrawal often between doses, so intradose withdrawal.
They have the sensation that was validated by their doctor, but which is probably not the case, that the -- they need the opioids to treat their pain when, in fact, taking the opioids is most likely just treating withdrawal from the last dose, but the physiology and the pain of withdrawal

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drives that individual to then become very preoccupied with their pain, very preoccupied with the opioids, spending more and more time at the doctor's office with pain complaints, reporting that the opioids are no longer working, because they don't work in most cases for chronic pain.
And again, the compassionate doctor, being told that no dose is too high, continues to escalate until that individual is at a very, very high dose, and that individual spends almost all of their time possibly going to the emergency room to try to get more opioids to help with their worsened pain and their withdrawal and their tolerance, to the point that that individual has developed a full-blown opioid addiction within the context of medical care.
Now, should it happen that at some point that doctor retires or that doctor gets ill and can't treat that person anymore or that individual

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do not walk through the gateway to illegal heroin?
MR. ARBITBLIT: Object to form.
QUESTIONS BY MR. TSAI:
Q. They turn away or otherwise take another path?
A. That is what it says here, yes.
Q. Okay. So then going back to page 1, the first page of the Muhuri article, in the introduction section, if you look down to the second paragraph, the authors observe that this progression from opioid -- prescription opioid medications to illegal heroin may result simply because heroin may be cheaper or easier for them to get in some locations.
Do you see that?
A. Is that here on this first page?
Q. Yeah. It's the first page -- I'm sorry, I have a different -- right. Sorry.
It is the second page of your exhibit. The Bates number ends in 6028, and it's the first full paragraph on that page.

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It says, "This progression may result simply because heroin may be cheaper or easier for them to get in some locations."
Do you see that?
A. Yes.
Q. Okay. Do you have any -- did you review any information or do any analysis to determine whether this reason for switched to illegal heroin, that it's cheaper or easier to get, whether that applied -- applies in Cuyahoga or in Summit Counties?
A. No.
Q. Okay.
MR. TSAI: Could we get Tab 8, please?
MR. ARBITBLIT: Okay. Counsel, I don't want to have a disagreement with you about this, but I don't see in our summary of the protocol anything that would overrule Federal Rule 106.
If you have something that you think prevents from me reading for the Rule of Completeness, I would like to know specifically what it is.

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I don't want to do this to cause animosity. I do think, based on my own experience and the rule itself, that anything that in fairness should be read with the same document as you've brought in to evidence should be read, and that's what the Rule of Completeness, Federal Rule 106 says.
If you have something that you think specifically overrules that rule in our deposition protocol, please let me know what it is. Otherwise, I'm going to do it again, and I don't want to do it again and have a fight with you. That's not my purpose.
MR. TSAI: We have a limited time on the record. Suffice it to say, I disagree.
MR. ARBITBLIT: You can disagree, and you can reserve your rights, but I'm just going to read one sentence from the same Muhuri article that says, "There are many plausible explanations for this finding, including the Gateway theory of drug

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use, that posits that the use of some drugs may expose individuals to a repertoire of biological and behavioral factors that could influence their future use of other drugs."
And that's at MDL_EXP_0006043, and you can reserve whatever rights you feel you have. But I'm trying to do this expeditiously. I think I've taken up a total of about two minutes of your time.
MR. TSAI: And not only do I reserve rights, I very much object to counsel's eating up the time on the record with his testimony and colloquy, which is prohibited under the deposition protocol expressly, so I want to move on.
Can we get Tab 8, please?
(Lembke Exhibit 6 marked for identification.)
QUESTIONS BY MR. TSAI:
Q. So I want to talk about the Compton article that you cite in your report.

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MR. ARBITBLIT: Object to form.
QUESTIONS BY MR. TSAI:
Q. That relationship?
A. I think that now I would say that my opinion has changed vis-à-vis this particular statement in the sense that this is a very general statement, that "the relationship between doctors' prescribing patterns and the initiation of heroin use remains unclear" because there's not a wealth of evidence I've reviewed showing there's a clear link between receiving an opioid prescription with a doctor and being at higher risk for progressing to heroin use.
Q. And does that evidence include the studies that we went over just now, the NASEM, the Muhuri, the Compton?
A. Yes.
Q. Okay. So going back to Compton -- do you have that article, the Compton article?
A. Yeah.
Q. If you could turn to page 156 of that article.
So in the left-hand column it's

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above that heading "Break." The heading says, "Heroin use among people who use prescription opioids nonmedically."
The sentence right before that, I'll read it, it says, "Finally, these differential properties and effects are likely to interact with interindividual variability in powerful complex and in completely predictable ways so that some persons who abuse prescription opioids could find heroin less rewarding than prescription opioids similarly rewarding or even more rewarding."
Do you see that?
A. Yes, I do.
Q. And do you agree with that statement?
A. I do.
Q. All right. For any individuals in Cuyahoga and Summit Counties with opioid use disorder, did you review any information or have any other basis to say whether their, as the New England Journal of Medicine put it, individual variability was such that they found heroin less similarly or more rewarding

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than prescription opioids?
A. I did not review individual cases.
Q. Okay. And if we could turn to the next page, 157, of the Compton article, and the right-hand column, there they give statistics that compare heroin use to use of other substances.
So am I reading this correctly, that heroin use over the period that was studied in the -- in this NEJM article also increased upon nonmedical users of stimulants?
A. Yes, you're reading it correctly.
Q. And what are examples of stimulants?
A. Stimulants -- nicotine is a stimulant. Methamphetamine is a stimulant. Cocaine is a stimulant.
Q. And during the same time period, heroin use also increased among users of tranquilizers, sedatives, cocaine, marijuana and alcohol, correct?
A. Yes.

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Q. Okay. And the next page, 158, if you look at this first full paragraph, the first sentence, the authors conclude that, "A key factor underlying the recent increases in rates of heroin use and overdose may be the low cost and high purity of heroin."
Do you see that?
A. I do.
Q. And so am I reading that correctly that the finding is that for -- when some persons who abuse prescription opioids then subsequently initiate heroin use, the cost and availability of heroin on the street are primary factors in that process?
A. To me that statement needs to be put in the larger context of increased exposure to heroin through a medical prescription and subsequent development of opioid addiction to medical heroin -- medical opioids, that then put all of those individuals at increased risk to progress to heroin use.
So I think that that statement, as I read their intention, is that in the

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mood.
QUESTIONS BY MR. TSAI:
Q. And we're talking about co-occurring mental illness. Let's talk about past history of substance use disorder.
Do you agree that past history of substance use disorder is a well-established risk factor for opioid use disorder?
A. Yes.
Q. And let me just give an example.
Edlund found that about half of opioid overdose deaths involved another drug, most commonly benzodiazepines.
Do you agree with that observation?
MR. ARBITBLIT: Object to form.
THE WITNESS: I agree that a large percentage of opioid overdose deaths involve another drug, commonly a sedative like a benzodiazepine.
QUESTIONS BY MR. TSAI:
Q. And can you give some examples of benzodiazepines?

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A. Sure: Valium, Klonopin, Xanax, Ativan, Librium.
Q. And you talk about a large percentage of opioid-related overdoses involve an individual that, to put it bluntly, has another addictive substance in their system.
What do you mean by a large percentage? Can you be more specific?
A. Two-thirds of deaths involving a benzodiazepine also involve an opioid prescription.
Q. And if you could turn to your book, "Drug Dealer, MD," and page 146, the internal page number of your book, and the Bates number for that ends in 5680.
A. Uh-huh.
Q. It's the first full paragraph. It says, "Today, doctors' prescription for benzodiazepines continue to rise and are a major culprit in the epidemic of prescription overdose deaths plaguing this country. Nonetheless, benzodiazepines are relatively ignored in the national discussion on rising rates of addiction."

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Is that still your belief?
A. Yes.
Q. And have you done any work or analysis to quantify to what extent benzodiazepines are, as you say, a major culprit in the epidemic of prescription overdose deaths plaguing this country?
A. So I published an article in the New England Journal of Medicine talking about the benzodiazepine problem. The article was not based on my own analysis, but was a review of published literature and some summative interpretations of how to intervene.
And based on other publications, we found a seven-time increased mortality involved benzodiazepines between late 1990s and 2016, two-thirds of which also involved an opioid.
Q. And did you, in connection with this article, dig into or quantify whether the benzodiazepine use occurred before or after the prescription opioid use?
A. No.
Q. So in your report on page 89,

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you say, "Economic downturn and the E-flux of manufacturing jobs in towns across America in the last 30 years have contributed to so-called deaths of despair, early mortality in middle-aged, non-Hispanic whites due primarily to drug overdose."
Do you remember that passage?
A. What page?
Q. I believe it's page 89 of your report, Exhibit 1, subsection B, and you cite to the Case, Deaton study.
Do you recall that?
A. Yes.
MR. TSAI: So can we get Tab 18?
A. Oh, yeah. I found it.
(Lembke Exhibit 8 marked for identification.)
QUESTIONS BY MR. TSAI:
Q. Okay. So if you could turn to -- the first page of the Case, Deaton article, this has a broad conclusion that "from 1999 to 2013, there was an increase in mortality among middle-aged, white, non-Hispanic Americans from all causes."

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Is that right?
A. That's correct.
Q. And in the introduction, the bold introductory section, this Case, Deaton study concluded that "these increased mortality was due to various factors, including drug and alcohol poisonings, suicide, chronic liver disease and cirrhosis."
Is that right?
A. Yes.
Q. And second to the last -- just to be clear, do opioids cause deterioration or chronic liver disease or cirrhosis?
A. Not typically.
Q. Okay. And is it fair to say that those drivers of the increased mortality noted in the study were likely due to alcohol use disorder or alcoholism colloquially?
A. Yes.
Q. Okay. And in your report, you acknowledge and agree that, quote/unquote, "economic disadvantage is a contributing factor to opioid-related mortality risk."
Is that correct?

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A. I would agree that it is one factor, but I also cited the Ruhm study, arguing that economic disadvantage contributes only 10 to 20 percent of mortality risk attributable to opioids, whereas the larger share of risk is due to the supply of opioids in a given geographic region.
Q. Okay. And have you conducted any quantitative analysis of your own to quantify the specific contribution of economic disadvantage to opioid-related mortality risk?
A. No.
Q. Do you have a model or an analytical framework to untangle any costs related to any such preexisting social and economic problems versus any conduct by any defendant with respect to Cuyahoga and Summit Counties?
MR. ARBITBLIT: Object to form.
THE WITNESS: I think that the Ruhm study could be used to inform a model with respect to the risk incurred by the supply of opioids

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versus economic disadvantage.
QUESTIONS BY MR. TSAI:
Q. Have you in this case yourself done any work to rule out the likelihood that social and economic problems preexisting in the counties were an important contributing factor to observe opioid use disorder and mortality?
MR. ARBITBLIT: Object to form.
THE WITNESS: I have stated in my report that economic factors were a factor, but not the most important factor.
The most important factor is the supply of opioids in that county. That is my opinion.
QUESTIONS BY MR. TSAI:
Q. And your opinion regarding the relative degree of contribution of social and economic problems, economic disadvantage, versus any conduct by the defendants, is that based on grappling with any county-specific data, or is it only based on the Ruhm study that you cited?
MR. ARBITBLIT: Object to form.

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THE WITNESS: It's based on my reading of the literature, not just this particular study, but also other studies showing that the amount of opioid prescribing in a given geographic region is the biggest predictor of opioid use disorder and opioid overdose in that region.
MR. TSAI: Okay. Can we do tab 27?
(Lembke Exhibit 9 marked for identification.)
QUESTIONS BY MR. TSAI:
Q. So I would like to dig down into the actual ground floor circumstances of how folks get prescribed opioid medications.
So do you recall that last year you gave a live interview on KQED with Michael Krasny for a program entitled "Medical Community Divided on Medicare's Policy to Shorten High-Dose Opioid Prescriptions"?
A. Yes, I do.
Q. Okay. And the exhibit that we've just put in front of you, does this

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appear to be a true and correct transcript of that interview that you participated in?
A. Yes, it does.
Q. Okay. And if you turn to page 8, they may have misspelled your name, but the Anna Lembke referred to, that's you?
A. Which page?
Q. It's page 8 of this exhibit.
A. Yes.
Q. Okay. So if you could turn to page 22 of the exhibit, and I'll start with line 2 of that page. I'll just read it.
You stated --
A. I'm sorry.
Q. Oh, sure.
A. I have two sets of page numbers here. Is this page 7, parentheses 22 to 25?
Q. That's correct.
A. Okay.
Q. And it's split up into quadrants. So it's the left-hand quadrant, page 22.
A. Yeah.
Q. And you stated, "While it's a very complicated connection that I do address

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in my book, it's hard to kind of put it into a sound bite, but in general, you know, people who are suffering from poverty, unemployment, low education, are also people who are known to be at higher risk for addiction.
"It's also true that this is a population that has turn towards disability payments as a way to make ends meet, and in order to, you know, justify the sick role and get disability payments. Many of these individuals have been forced to take certain type of medications because taking a medication can legitimize the sick role. So it's a complex web."
Do you see that?
A. Yes, I do.
Q. What is "justifying the sick role"? What does that mean?
A. Well, that's a term that goes back to Talcott Parsons, who identified social roles that people adopt, and anybody who participates in the health care system and views themselves as a, quote/unquote, patient is someone who has adopted the sick

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role.
Q. Okay. In your opinion -- is it still your opinion that certain individuals who have turned to disability payments are being forced to take certain types of medications to justify the sick role?
A. So this is part of -- this is an excerpt from, as I state here, a much more complicated issue that I address more thoroughly in my book regarding how disability can sometimes consciously or otherwise encourage people living in poverty to adopt the sick role as a way to get disability payments.
And in order to legitimize the sick role, they have to participate in that health care system, and in the '90s and early aughts and through today, it turns out participating in the health care system as a pain patient was actually dangerous because that -- the risk of being exposed unnecessarily to opioids was and continues to be very high, and exposure to opioids is one of the major risk factors for addiction.
Q. So you use the term "forced to

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take certain types of medications." Who in your opinion is forcing these individuals to take opioid medications to justify what you've called the sick role?
MR. ARBITBLIT: Object to form.
QUESTIONS BY MR. TSAI:
Q. How does that mechanism work?
A. The individuals are being forced by economic circumstance.
Q. And this phenomenon of being forced by their individual economic circumstance to take certain medications to justify the sick role, have you reviewed any data specific to Cuyahoga or Summit Counties to determine whether that phenomenon occurred in the counties?
A. Nationally we've seen a huge increase in the number of people going on to disability for chronic pain conditions. For example, Social Security Disability insurance today, there are more than 8 million people enrolled in Social Security Disability insurance, primarily for chronic pain conditions.
So I believe that I can

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extrapolate that to include Cuyahoga and Summit Counties, that there are individuals there who -- with chronic conditions who have gone on disability.
Q. Have you done the exercise of extrapolating specifically to Cuyahoga and Summit Counties?
A. Do you mean a quantitative analysis?
Q. Yes.
A. No.
Q. Is it your opinion that defendants have any role in structuring or implementing the Social Security Disability network?
MR. ARBITBLIT: Object to form.
THE WITNESS: I think defendants have had a major role in the narrative around how chronic pain should be treated for patients who are participating in the health care system. And as a result, patients have been endangered because of being exposed to dangerous -- the dangerous substance that is opioids.

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QUESTIONS BY MR. TSAI:
Q. Though, that's kind of confusing to me. The narrative is -- it's a very broad term.
A. Uh-huh.
Q. Can you point to any specific instance where any conduct by a defendant caused an individual within the disability payment network, for example, Social Security Disability, to have been forced to take their particular opioid medication?
MR. ARBITBLIT: Object to form.
THE WITNESS: So I think defendants have been involved in the change, the cultural change, in our conceptualization of pain and have created a climate in which doctors have been forced to treat pain with opioids, such that individuals who are on disability and get care for their chronic pain are at increased risk to be exposed to opioids.
QUESTIONS BY MR. TSAI:
Q. So you talked about climate, the culture and narrative.

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These are all pretty qualitative, would you agree?
MR. ARBITBLIT: Object to form.
THE WITNESS: Yes.
QUESTIONS BY MR. TSAI:
Q. Can you point to a specific instance, act, that fits the scenario that you've outlined?
MR. ARBITBLIT: Object to form.
THE WITNESS: Yeah.
So in my report, I talk about the Wisconsin Pain and Policy Study Group, and I provide evidence that the -- that industry funded the Pain & Policy Study Group, defendants funded the Pain & Policy Study Group, over a period of many years.
And the Pain & Policy Study Group, in turn, carried out programs that benefitted the industry, not only by increasing access to opioids and limiting regulatory scrutinary {sic}, but also changing the culture around pain treatment and identifying a model in which doctors feared retribution if

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they didn't use opioids to treat pain.
QUESTIONS BY MR. TSAI:
Q. Can you point to any instance where anyone providing funds had a role in the design and conduct of the specific study or program that you're referring to?
MR. ARBITBLIT: Object to form.
THE WITNESS: On October 9, 2002, Joranson wrote to Mr. Kaiko, a Purdue representative, quote, "For the past several years, without your support, some of the progress reported below would not have been possible," end quote.
QUESTIONS BY MR. TSAI:
Q. And in your view is that designing and conducting the study?
MR. ARBITBLIT: Object to form.
THE WITNESS: It's not a study they're referring to. It's the model policy rolled out by the Pain & Policy Study Group, which had enormous influence in the way that pain was treated and is still treated today --

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So those are the types of things I'm talking about.
QUESTIONS BY MR. TSAI:
Q. What about hospital administrators, do they have an important role in ordaining and mandating protocols and algorithms as you've referred to?
A. Hospital administrators have an important role in that, but, again, any role that they played, I believe, was as unwitting accomplices in the deliberate misrepresentation of the benefits of opioids and their risks by the defendants.
Q. Third-party payers, health insurance companies, they have an important role in ordaining the mandates and the protocols and the algorithms within the industrialized medicine system that you referred to?
A. Yes, they do.
Q. Okay. And when you say that, you know, there's a doctor, he or she feels enormous pressure to make -- satisfy his or her patients, get them quickly out, having industrial line, like an assembly line, who

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is that pressure coming from?
MR. ARBITBLIT: Object to form.
THE WITNESS: That pressure comes from the patients themselves and the desire of the doctor to do a good job, and usually people who go into medicine are people who want to have quality relationships with their patients and feel like they help their patients. But there are also institutional pressures on doctors to have good doctor/patient satisfaction surveys.
And there's also importantly patients' expectations around what they expect the doctor will provide to them when they see that doctor.
And because of the defendants' actions, patients came to expect that when they had pain, they should get an opioid from their doctor. And we do know that there are data showing that when patients' expectations are not met, they're more likely to rate that doctor poorly.

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So there was overall enormous pressure on doctors and on the system to prescribe opioids even for minor and chronic pain conditions in the absence of evidence because that evidence was misrepresented to all of these various parties by the defendants.
QUESTIONS BY MR. TSAI:
Q. Have you done any analysis -- do you have any other basis to reliably rule out the likelihood that there are these pressures on prescribing doctors following protocols and algorithms that came from sources that had nothing to do with defendants?
MR. ARBITBLIT: Object to form.
THE WITNESS: I have the lived experience. I got my degree in medicine in the early 1990s, and I lived through these, you know, past two and a half decades, and I personally felt the pressures from entities like the Joint Commission in order to practice in a certain way.

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QUESTIONS BY MR. TSAI:
Q. And have you done any quantitative analysis to tease out, let's say, the role of hospital administrators, or the role of third-party payers, in any specific opioid prescribing decision of any doctor in Cuyahoga and Summit County?
MR. ARBITBLIT: Object to form.
THE WITNESS: No.
QUESTIONS BY MR. TSAI:
Q. So moving on, just briefly, you talked about the CME that you attended. It was back in 2001.
A. Yes.
Q. So after attending that CME, you didn't suddenly lose your independent medical judgment, right?
You still had your own independent medical judgment, you agree?
A. CME courses have an enormous influence on the information that doctors acquire on which to base their medical judgment.
So I didn't lose my medical judgment, but I can only make judgment based

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on the information that I have and the misrepresentation at that CME and others like it across the country.
Q. And you invoke your personal experience?
A. Yes.
Q. So you didn't forget all of your prior medical education and training after leaving that -- how long was that session? One hour? Day long?
A. (Witness nods head.)
MR. ARBITBLIT: Objection.
QUESTIONS BY MR. TSAI:
Q. Did you forget your medical education and training?
MR. ARBITBLIT: Object to form.
THE WITNESS: Could you specify what medical education and training you're referring to?
QUESTIONS BY MR. TSAI:
Q. Yeah. Your medical school, your residency, your fellowship, all of your experience in the clinical setting, did the CME make you forget all of that?
MR. ARBITBLIT: Object to form.

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THE WITNESS: I didn't forget it, but medicine is a discipline in which we must keep up with the science as it evolves, and a very busy clinician, including myself, does not have the time to read every single peer-reviewed article and dig into who funded it or whether or not they accurately represented their information.
So we rely on continuing medical education courses in order to acquire that knowledge. So when I went to that continuing medical education course, I acquired a body of knowledge that was not, in fact, based in the evidence, that then influenced my practice going forward and that of my colleagues.
QUESTIONS BY MR. TSAI:
Q. And to pick up on what you said, you have to keep up -- science evolves, medicine evolves.
So that's how medicine works, right? You have to make the best decisions

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that you can based on the scientific evidence that's available --
MR. ARBITBLIT: Object to form.
QUESTIONS BY MR. TSAI:
Q. -- at the time of prescription; do you agree with that?
MR. ARBITBLIT: Object to form.
THE WITNESS: As long as the science is being accurately represented.
QUESTIONS BY MR. TSAI:
Q. All right. So going back to your TED Talk, if you could turn to page 5 of that transcript?
A. Yeah.
Q. So starting on page 11, you say --
A. Page 5 or page 11?
Q. Sorry, starting on page -- line 11 of page 5, you say, "The second big invisible force driving this opioid epidemic is the medicalization of poverty."
Do you see that?
A. Yes.
Q. Is it your opinion now that a

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big driver of the opioid epidemic is the medicalization of poverty as you stated here in 2017?
A. It's my opinion that the medicalization of poverty is a factor in the opioid epidemic, but not as big a factor as supply.
Q. Okay. And have you done any analysis to quantify the relative significance of the contributions of the factor of medicalization of poverty, to use your words, and prescription opioid supply?
MR. ARBITBLIT: Object to form.
THE WITNESS: I have not personally done that analysis, but there are others who I cite in my report who talk about, again, as I've answered in a previous question, economic factors not being the primary driver, and that supply of opioids in a given region being the primary driver of opioid use disorder and opioid overdose in that region.
QUESTIONS BY MR. TSAI:
Q. So at this time what percentage

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the record. I would like to take a quick break. Thanks.
VIDEOGRAPHER: We're going off the record, and the time is 1:37 p.m.
(Off the record at 1:37 p.m.)
VIDEOGRAPHER: We are now going back on the record, and the time is 1:56 p.m.
(Lembke Exhibit 13 marked for identification.)
QUESTIONS BY MR. TSAI:
Q. So the next exhibit is Appendix I to your report, and it has five sections. Section B relates to Mallinckrodt. Can you turn to that?
A. Sure.
Q. So, first of all, have you reviewed any information that you can point to or have any other basis to say that any of the statements that you attribute to Mallinckrodt in Appendix I.B of your report were actually seen by any specific doctor or other person in Cuyahoga and Summit Counties?
A. I don't have specific examples, but I do believe these misrepresentations

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were widely disseminated, including in Summit and Cuyahoga Counties.
Q. So are you speculating that they would be seen by doctors in Cuyahoga and Summit Counties but cannot point to any specific basis to back that up? Is that fair to say?
MR. ARBITBLIT: Object to form.
THE WITNESS: Because these misrepresentations were so deeply interwoven into medical education, it would be hard for me to believe that physicians in Summit and Cuyahoga Counties hadn't seen these misrepresentations, but I cannot point to any specific examples.
QUESTIONS BY MR. TSAI:
Q. And when you talked to doctors after your pair of talks last year in Ohio, did any of those doctors who practice in Cuyahoga and Summit Counties tell you that they relied on any of the statements that you attribute to Mallinckrodt specifically?
MR. ARBITBLIT: Object to form.
THE WITNESS: The doctors that

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I spoke with validated that the misrepresentations laid out here in this section under Mallinckrodt were misrepresentations that they had been the recipients of in their medical training and that had led them to prescribe opioids in a way that they now realize was not evidence based.
QUESTIONS BY MR. TSAI:
Q. Did anyone use the word "Mallinckrodt"?
A. No, not that I recall.
Q. Did anyone use the word -- any of the products that are -- that Mallinckrodt made specifically?
A. Not that I recall.
Q. Okay. Have you done any analysis to determine whether or to what extent Mallinckrodt's marketing of opioid products, specifically Mallinckrodt, influenced prescribing decisions or rates in Cuyahoga and Summit Counties?
MR. ARBITBLIT: Object to form.
THE WITNESS: Mallinckrodt held the Train-the-Trainer events which

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communicated these misrepresentations to individuals who then went throughout the country disseminating these misrepresentations, and I don't have any specific examples, but I wouldn't be surprised if they disseminated these misrepresentations also in Summit and Cuyahoga Counties.
Also Mallinckrodt promoted a book through the CARES Alliance called Defeat Chronic Pain Now!, and I wouldn't be surprised if that book was read by providers in Cuyahoga and Summit County and that book contained these misrepresentations.
QUESTIONS BY MR. TSAI:
Q. So you say you wouldn't be surprised, but can you point to anything in your materials that you've provided to us that specifically isolates the contribution of Mallinckrodt's conduct to promotional activity with respect to opioid prescribing or any adverse event in Cuyahoga and Summit County?
MR. ARBITBLIT: Object to form.